

WHAT IS CLAIMED IS:

1. An indicator device for visually indicating a pressure of blood inside a blood vessel, comprising:

a body, the body comprising

a duct extending in the body and having a sealed proximal end;

5 a distal end portion adapted to be positioned inside the blood vessel and comprising a liquid inlet opening in fluid communication with the duct; and

a window comprising an at least semi-transparent section configured to enable visual observation of blood entering into the duct via the inlet opening when the inlet opening is located inside the blood vessel.

2. The device as claimed in claim 1, wherein the sealed proximal end of the duct comprises a blood accommodating chamber.

3. The device as claimed in claim 2, wherein the duct opens into the chamber via an aperture having a spill-over edge, the aperture being located at a level above a bottom surface of the blood accommodating chamber, whereby return flow of blood back into the duct is prevented.

4. The device as claimed in claim 2, wherein the blood accommodating chamber is located in the body, and wherein the body further comprises an insertion tube extending distally of the body.

5. The device as claimed in claim 4, wherein the inlet opening is located on the insertion tube.

6. The device as claimed in claim 2, wherein the duct extends vertically to an aperture opening into the blood accommodating chamber.

7. The device as claimed in claim 2, wherein the duct extends horizontally above the blood accommodating chamber to an aperture opening into the blood accommodating chamber.

8. The device as claimed in claim 1, wherein the duct exhibits a varying cross-section over its length.

9. The device as claimed in claim 8, wherein the sealed proximal end of the duct comprises a blood accommodating chamber, and wherein the duct becomes narrower in the direction towards the blood accommodating chamber.

10. The device as claimed in claim 8, wherein the sealed proximal end of the duct comprises a blood accommodating chamber, and wherein the duct widens in the direction towards the blood accommodating chamber.

11. The device as claimed in claim 8, wherein the duct first becomes narrow and then widens.

12. The device as claimed in claim 8, wherein the cross-section varies within the window.

13. The device as claimed in claim 1, wherein the duct is helically shaped.

14. The device as claimed in claim 3, wherein the blood accommodating chamber and the duct are dimensioned such that a counter-pressure therein when blood enters will cause a blood meniscus at a lowest possible systolic pressure to be located within the window.

15. The device as claimed in claim 14, wherein the blood accommodating chamber and the duct are dimensioned such that a counter-pressure therein when blood enters will cause a blood meniscus at a lowest possible systolic pressure to be located approximately at the spill-over edge.

16. The device as claimed in claim 14, wherein the meniscus is essentially perpendicular with respect to a direction of flow in the duct.

17. A system for sealing a percutaneous wound in a blood vessel, comprising:  
an inner seal adapted to be positioned against an inner surface of a vessel wall of the blood vessel and a locking member connected to the inner seal and adapted to be positioned

against an outer surface of the vessel wall, such that the percutaneous puncture is sealed  
5 therebetween;

a body portion having at least one duct for insertion and extraction of devices to and  
from an inner region of said blood vessel;

an insertion tube coupled to said body portion, and adapted to be inserted into the  
blood vessel through said wound, and through which the inner seal can be passed for  
10 deployment inside the blood vessel; and

an indicator device for visually indicating a pressure of blood inside said blood vessel,  
comprising an indicator body, the indicator body comprising:

an indicator duct extending in the indicator body and having a sealed proximal end;

a distal end portion adapted to be positioned inside the blood vessel and comprising a  
15 liquid inlet opening in fluid communication with the indicator duct; and

a window in the form of an at least semi-transparent section configured to enable  
visual observation of blood entering into the indicator duct via the inlet opening when the  
inlet opening is located inside the blood vessel.

18. The system as claimed in claim 17, wherein the indicator device is integrated in  
said body portion.

19. The system as claimed in claim 17, wherein said body portion further comprises a  
window through which blood can be visually observed.

20. A method for visually indicating a pressure of blood inside a blood vessel,  
comprising:

providing an indicator device comprising a body, the body comprising

a duct extending in the body and having a sealed proximal end,

5 a distal end portion adapted to be positioned inside the blood vessel and  
comprising a liquid inlet opening in fluid communication with the duct, and

a window in the form of an at least semi-transparent section configured to  
enable visual observation of blood entering into the duct via the inlet opening when the inlet  
opening is located inside the blood vessel;

10 positioning said distal end portion inside the blood vessel; and  
indicating said pressure.